

Diploma Thesis Assignment

Student:

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Study Programme:

N0714A270004 Mechatronics

Title:

Data Analysis in Mechatronic Systems
Analýza dat z mechatronických systémů

The thesis language:

English

Description:

1. Study the online materials on data generation in manufacturing or production process and from the available sources select industries and processes.
2. Describe a production process and the data generated by this process.
3. Select and describe available tools for data measurement and analysis and on an example demonstrate the use of data analysis tools.
5. Specify and design the visualization and a data model.
6. Compare your new findings and verify them for the data analysis and visualization and conclusions in decision making process.
7. Summarize the results and propose the next step of the work.

References:

PTAK, Richard, J. MORGENTHAL a Simon FORGE, 1999. Manager's guide to distributed environments: from legacy to living systems. V1. New York: John Wiley. ISBN 04-711-9712-2.
CLARK, Dan. Beginning Power BI [online]. 1. Berkeley, CA: Apress, 2017 [cit. 2020-06-12]. DOI: 10.1007/978-1-4842-2577-6. ISBN 978-1-4842-2576-9. Available from: <https://link.springer.com/book/10.1007/978-1-4842-2577-6#authorsandaffiliationsbook>
GEORGE, Geena Alexander. Monitoring Performance of Process Control Assets [online]. Ostrava, 2019 [cit. 2020-12-02]. Available from: <http://hdl.handle.net/10084/137474>. Diplomová práce. Vysoká škola báňská - Technická univerzita Ostrava.

Extent and terms of a thesis are specified in directions for its elaboration that are opened to the public on the web sites of the faculty.

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